

Notice of Allowability

Application No.

09/942,717

Examiner

Mishawn N. Dunn

Applicant(s)

MURAKAMI ET AL.

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 31 August 2001.
2. ☒ The allowed claim(s) is/are 1-12.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with John Mattingly on January 5, 2006.

2. Claim 4 has been amended as follows:

A data recorded medium on which a multiplexed stream is recorded that includes a video stream and an audio stream and is acquired by dividing each of said video stream and said audio stream into data blocks, adding headers to said data blocks to produce packets and multiplexing said packets and which is of a model that allows said multiplexed stream to be read in a buffer of a decoder packet by packet and to be outputted picture by picture and audio access unit by audio access unit in accordance with a playback time, wherein said multiplexed stream ~~being such as to satisfy~~ satisfies a condition of $T_{ea} \leq T_{sv}$ where T_{sv} is a read start time of a head packet in a specific one of video object units each having a series of packets including at least one group of pictures, which is a video encoding unit in said video stream, and T_{ea} is a read end time of a packet including data of a last portion of an audio access unit having a playback end time after but closest to a playback start time of video included in said specific video object unit or an audio access unit having a playback end time after but closest to that playback start time.

Art Unit: 2616

3. Claim 5 has been amended as follows:

The data recorded medium according to ~~claim 4~~ claim 2, wherein said threshold is an integer multiple of a duration time of reproduction of said audio access unit.

4. Claim 6, has been amended as follows:

A data recording apparatus for dividing each of a plurality of streams including a video stream and an audio stream into data blocks, adding headers to said data blocks to produce packets, multiplexing said packets and recording said multiplexed packets, comprising: first buffer means for storing said video stream; second buffer means for storing said audio stream; a control section for comparing said video stream from said first buffer means with said audio stream from said second buffer means to determine an order of packets and a parameter ~~in such a way~~ so that a difference of playback start time or a difference of playback end time of video and audio to be recorded in a same video object unit in a multiplexed stream to be outputted becomes equal to or smaller than a threshold and outputting said parameter; and a multiplexing section for dividing said video stream from said first buffer means and said audio stream from said second buffer means into data blocks in accordance with said parameter and adding headers to said data blocks to produce packets, multiplexing said packets and outputting a multiplexed stream.

5. Claim 8, has been amended as follows:

A program for allowing a computer to execute procedures of dividing each of a plurality of streams including a video stream and an audio stream into data blocks, adding headers to said data blocks to produce packets, multiplexing said packets and

Art Unit: 2616

recording said multiplexed packets, comprising: a first step of storing said video stream and said audio stream in buffers; a second step of comparing said video stream and audio stream read from said buffers with each other to determine a multiplexing timing ~~in such a way~~ so that a difference of playback start time or a difference of playback end time of video and audio to be recorded in a same video object unit in a multiplexed stream to be outputted becomes equal to or smaller than a threshold and outputting said parameter; and a third step of multiplexing video packets and audio packets in accordance with said multiplexing timing and outputting a multiplexed stream.

6. The following changes to the drawings have been approved by the examiner and agreed upon by applicant: Figure 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated.

7. To clarify, for the record, in the aforementioned interview with the applicant's representative, the claim language "which is a video encoding unit in said video stream," (claim 2, para. 2, line 6; claim 4, para. 2, lines 5-6) refers to the group of pictures within the VOBUs.

Conclusion

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

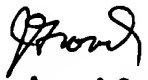
Art Unit: 2616

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mishawn N. Dunn whose telephone number is 571-272-7635. The examiner can normally be reached on Monday - Friday 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on 571-272-7950. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mishawn Dunn
January 5, 2006


James J. Groody
Supervisory Patent Examiner
Art Unit 262-2614